

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,590	04/03/2001	Takahiro Imada	K-1970	8697
75	590 08/29/2002			
KANESAKA & TAKEUCHI			EXAMINER	
1423 POWHATAN STREET ALEXANDRIA, VA 22314			MARX,	IRENE
			ART UNIT	PAPER NUMBER
			1651	
			DATE MAILED: 08/29/2002	7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/824,590

Applicant(s)

Examiner

Art Unit

Irene Marx

1651

lmada et al.



	The M	IAILING DATE of this communication a	ppears on the cover sh	heet with	the correspondence address		
Period 1	for Reply	·					
	A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.						
- Extens	ions of time r	nay be available under the provisions of 37 CFR 1.13	36 (a). In no event, however, i	may a reply	be timely filed after SIX (6) MONTHS from the		
- If the p	eriod for repl	communication. y specified above is less than thirty (30) days, a reply	within the statutory minimum	of thirty (3	30) days will be considered timely.		
		y is specified above, the maximum statutory period v in the set or extended period for reply will, by statute					
-		by the Office later than three months after the mailing adjustment. See 37 CFR 1.704(b).	g date of this communication, e	even if timel	y filed, may reduce any		
Status	•	•					
1) 💢	Respons	ive to communication(s) filed on Jul	9, 2002		·		
2a) 🗌	This acti	ion is FINAL . 2b) 💢 T	his action is non-fina	l.			
3) 🗆	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.						
Disposi	tion of Cl	aims					
4) 🗶	Claim(s)	1-14			is/are pending in the application.		
4	la) Of the	above, claim(s) 7-14			is/are withdrawn from consideration.		
5) 🗆							
6) 💢	Claim(s)	1-6			is/are rejected.		
7) 🗌	Claim(s)				is/are objected to.		
8) 🗌	Claims _		are	e subjec	t to restriction and/or election requirement.		
Applica	ition Pape	ers					
9) 🗆	The spec	cification is objected to by the Exam	iner.				
10)	0) ☐ The drawing(s) filed on is/are a) ☐ accepted or b) ☐ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)	The prop	posed drawing correction filed on	is	:: a)□	approved b) \square disapproved by the Examiner.		
`		ved, corrected drawings are required in					
12)	The oath	n or declaration is objected to by the	Examiner.				
Priority under 35 U.S.C. §§ 119 and 120							
13) X Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) 🕽	(All b)	\square Some* c) \square None of:					
	1. 💢 Ce	rtified copies of the priority documer	nts have been receive	ed.			
	2. □ Ce	rtified copies of the priority documer	nts have been receive	ed in Ap	plication No		
	3. □ Co	pies of the certified copies of the pri application from the Internation					
*S	ee the att	tached detailed Office action for a lis	it of the certified cop	ies not r	eceived.		
14)	Acknow	ledgement is made of a claim for do	mestic priority under	35 U.S.	.C. § 119(e).		
a) The translation of the foreign language provisional application has been received.							
15)∐	Acknow	ledgement is made of a claim for do	mestic priority under	35 U.S.	.C. §§ 120 and/or 121.		
Attachm							
\sim		ences Cited (PTO-892)			O-413) Paper No(s)		
_		eperson's Patent Drawing Review (PTO-948) closure Statement(s) (PTO-1449) Paper No(s).	6) Other:	romai Patei	nt Application (PTO-152)		
31 □ INI	VIIII DISC	Josefe Statement(s) (FTO-1445) Paper NO(s).	o/ other:				

Serial No. 09/824590 Art Unit 1651

The election without traverse filed July 9, 2002 is acknowledged. Claims 7-14 are withdrawn from consideration as directed to a non-elected invention. Claims 1-6 are being considered on the merits.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6 are rejected under 35 U.S.C. 101 because this claim reads on the organism per se which is found in nature and thus, is unpatentable to applicant. Consequently, the claim does not embody patentable subject matter as defined in 35 USC 101. See, e.g., American Wood v. Fiber Disintegrating Co., 90 U.S. 566 (1974); American Fruit Growers v. Brogdex Co., 283 U.S. 1 (1931); Funk Brothers Seed. Co. v. Kalo Innoculant Co.., 33 U.S. 127 (1948); Diamond v. Chakrabarty, 206 U.S.P.Q. 193 (1980).

It is suggested that applicant use the language "a biologically pure culture" in connection with the strain to identify a product that is not found in nature.

Rejections under 35 U.S.C § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The invention appears to employ novel strains of fungi. It is not clear if the written description is sufficiently repeatable to avoid the need for a deposit. Further it is unclear if the starting materials were readily available to the public at the time of invention.

It appears that a deposit was made in this application as filed as noted on page 11 of the specification. However, it is not clear if the deposit meets all of the criteria set forth in 37 CFR

1.801-1.809. Applicant or applicant's representative may provide assurance of compliance with the requirements of 35 U.S.C § 112, first paragraph, in the following manner.

SUGGESTION FOR DEPOSIT OF BIOLOGICAL MATERIAL

A declaration by applicant, assignee, or applicant's agent identifying a deposit of biological material and averring the following may be sufficient to overcome an objection and rejection based on a lack of availability of biological material.

- 1. Identifies declarant.
- 2. States that a deposit of the material has been made in a depository affording permanence of the deposit and ready accessibility thereto by the public if a patent is granted. The depository is to be identified by name and address.
- 3. States that the deposited material has been accorded a specific (recited) accession number.
- 4. States that all restriction on the availability to the public of the material so deposited will be irrevocably removed upon the granting of a patent.
- 5. States that the material has been deposited under conditions that access to the material will be available during the pendency of the patent application to one determined by the Commissioner to be entitled thereto under 37 CFR 1.14 and 35 U.S.C § 122.
- 6. States that the deposited material will be maintained with all the care necessary to keep it viable and uncontaminated for a period of at least five years after the most recent request for the furnishing of a sample of the deposited microorganism, and in any case, for a period of at least thirty (30) years after the date of deposit for the enforceable life of the patent, whichever period is longer.
- 7. That he/she declares further that all statements made therein of his/her own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the instant patent application or any patent issuing thereon.

Alternatively, it may be averred that deposited material has been accepted for deposit under the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the purpose of Patent Procedure (e.g. see 961 OG 21, 1977) and that all restrictions on the

availability to the public of the material so deposited will be irrevocably removed upon the granting of a patent.

Additionally, the deposit must be referred to in the body of the specification and be identified by deposit (accession) number, date of deposit, name and address of the depository and the complete taxonomic description.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cagas *et al*.

The claims are drawn to a symbiotic fungus of the genus *Neotyphodium* which produces chanoclavine.

The cited reference discloses a symbiotic fungus of the genus *Neotyphodium* which appears to be identical to the presently claimed symbiotic fungus (See, e.g., page 366) since it produces chanoclavine. The referenced microorganism appears to be identical to the presently claimed symbiotic fungus and is considered to anticipate the claimed symbiotic fungus since it is disclosed as being found to live in plant tissue, is of the same class as that of the microorganism claimed and is taught to be effective in the production of chanoclavine. Consequently, the claimed symbiotic fungus appears to be anticipated by the reference.

In the alternative, even if the claimed symbiotic fungus is not identical to the referenced symbiotic fungus with regard to some unidentified characteristics, the differences between that which is disclosed and that which is claimed are considered to be so slight that the referenced microorganism is likely to inherently possess the same characteristics of the claimed microorganism particularly in view of the similar characteristics which they have been shown to share. Thus the claimed strain would have been obvious to those skilled in the art within the meaning of USC 103.

Accordingly, the claimed invention as a whole was at least <u>prima facie</u> obvious, if not anticipated by the reference, especially in the absence of evidence to the contrary.

Claims 1 and 3-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bacon or Porter *et al.* or Bacon *et al.*

The claims are drawn to a symbiotic fungus which produces chanoclavine.

The cited reference discloses a symbiotic fungus which appears to be identical to the presently claimed symbiotic fungus (see, e.g. Table 1, Figure 1, and Table 1, respectively) since produces chanoclavine. The referenced microorganism appears to be identical to the presently claimed symbiotic fungus and is considered to anticipate the claimed symbiotic fungus since it is disclosed as being found to live in plant tissue, is of the same class as that of the microorganism claimed and is taught to be effective in the production of chanoclavine. Consequently, the claimed symbiotic fungus appears to be anticipated by the reference.

In the alternative, even if the claimed symbiotic fungus is not identical to the referenced symbiotic fungus with regard to some unidentified characteristics, the differences between that which is disclosed and that which is claimed are considered to be so slight that the referenced microorganism is likely to inherently possess the same characteristics of the claimed microorganism particularly in view of the similar characteristics which they have been shown to share. Thus the claimed strain would have been obvious to those skilled in the art within the meaning of USC 103.

Accordingly, the claimed invention as a whole was at least <u>prima facie</u> obvious, if not anticipated by the reference, especially in the absence of evidence to the contrary.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irene Marx whose telephone number is (703) 308-2922. The examiner can normally be reached on Monday through Friday from 6:30 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn, can be reached on (703) 308-4743. The appropriate fax phone number for the organization where this application or proceeding is assigned is before final (703) 872-9306 and after final, (703) 872-9307.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Service whose telephone number is (703) 308-0198 or the receptionist whose telephone number is (703) 308-1235.

Irene Marx Primary Examiner Art Unit 1651 Serial No. 09/824590 Art Unit 1651

The election without traverse filed July 9, 2002 is acknowledged. Claims 7-14 are withdrawn from consideration as directed to a non-elected invention. Claims 1-6 are being considered on the merits.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6 are rejected under 35 U.S.C. 101 because this claim reads on the organism per se which is found in nature and thus, is unpatentable to applicant. Consequently, the claim does not embody patentable subject matter as defined in 35 USC 101. See, e.g., American Wood v. Fiber Disintegrating Co., 90 U.S. 566 (1974); American Fruit Growers v. Brogdex Co., 283 U.S. 1 (1931); Funk Brothers Seed. Co. v. Kalo Innoculant Co.., 33 U.S. 127 (1948); Diamond v. Chakrabarty, 206 U.S.P.Q. 193 (1980).

It is suggested that applicant use the language "a biologically pure culture" in connection with the strain to identify a product that is not found in nature.

Rejections under 35 U.S.C § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The invention appears to employ novel strains of fungi. It is not clear if the written description is sufficiently repeatable to avoid the need for a deposit. Further it is unclear if the starting materials were readily available to the public at the time of invention.

It appears that a deposit was made in this application as filed as noted on page 11 of the specification. However, it is not clear if the deposit meets all of the criteria set forth in 37 CFR

1.801-1.809. Applicant or applicant's representative may provide assurance of compliance with the requirements of 35 U.S.C § 112, first paragraph, in the following manner.

SUGGESTION FOR DEPOSIT OF BIOLOGICAL MATERIAL

A declaration by applicant, assignee, or applicant's agent identifying a deposit of biological material and averring the following may be sufficient to overcome an objection and rejection based on a lack of availability of biological material.

- 1. Identifies declarant.
- 2. States that a deposit of the material has been made in a depository affording permanence of the deposit and ready accessibility thereto by the public if a patent is granted. The depository is to be identified by name and address.
- 3. States that the deposited material has been accorded a specific (recited) accession number.
- 4. States that all restriction on the availability to the public of the material so deposited will be irrevocably removed upon the granting of a patent.
- 5. States that the material has been deposited under conditions that access to the material will be available during the pendency of the patent application to one determined by the Commissioner to be entitled thereto under 37 CFR 1.14 and 35 U.S.C § 122.
- 6. States that the deposited material will be maintained with all the care necessary to keep it viable and uncontaminated for a period of at least five years after the most recent request for the furnishing of a sample of the deposited microorganism, and in any case, for a period of at least thirty (30) years after the date of deposit for the enforceable life of the patent, whichever period is longer.
- 7. That he/she declares further that all statements made therein of his/her own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the instant patent application or any patent issuing thereon.

Alternatively, it may be averred that deposited material has been accepted for deposit under the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the purpose of Patent Procedure (e.g. see 961 OG 21, 1977) and that all restrictions on the

availability to the public of the material so deposited will be irrevocably removed upon the granting of a patent.

Additionally, the deposit must be referred to in the body of the specification and be identified by deposit (accession) number, date of deposit, name and address of the depository and the complete taxonomic description.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cagas *et al*.

The claims are drawn to a symbiotic fungus of the genus *Neotyphodium* which produces chanoclavine.

The cited reference discloses a symbiotic fungus of the genus *Neotyphodium* which appears to be identical to the presently claimed symbiotic fungus (See, e.g., page 366) since it produces chanoclavine. The referenced microorganism appears to be identical to the presently claimed symbiotic fungus and is considered to anticipate the claimed symbiotic fungus since it is disclosed as being found to live in plant tissue, is of the same class as that of the microorganism claimed and is taught to be effective in the production of chanoclavine. Consequently, the claimed symbiotic fungus appears to be anticipated by the reference.

In the alternative, even if the claimed symbiotic fungus is not identical to the referenced symbiotic fungus with regard to some unidentified characteristics, the differences between that which is disclosed and that which is claimed are considered to be so slight that the referenced microorganism is likely to inherently possess the same characteristics of the claimed microorganism particularly in view of the similar characteristics which they have been shown to share. Thus the claimed strain would have been obvious to those skilled in the art within the meaning of USC 103.

Accordingly, the claimed invention as a whole was at least <u>prima facie</u> obvious, if not anticipated by the reference, especially in the absence of evidence to the contrary.

Claims 1 and 3-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bacon or Porter *et al.* or Bacon *et al.*

The claims are drawn to a symbiotic fungus which produces chanoclavine.

Serial No. 09/824590 Art Unit 1651

The cited reference discloses a symbiotic fungus which appears to be identical to the presently claimed symbiotic fungus (see, e.g. Table 1, Figure 1, and Table 1, respectively) since produces chanoclavine. The referenced microorganism appears to be identical to the presently claimed symbiotic fungus and is considered to anticipate the claimed symbiotic fungus since it is disclosed as being found to live in plant tissue, is of the same class as that of the microorganism claimed and is taught to be effective in the production of chanoclavine. Consequently, the claimed symbiotic fungus appears to be anticipated by the reference.

In the alternative, even if the claimed symbiotic fungus is not identical to the referenced symbiotic fungus with regard to some unidentified characteristics, the differences between that which is disclosed and that which is claimed are considered to be so slight that the referenced microorganism is likely to inherently possess the same characteristics of the claimed microorganism particularly in view of the similar characteristics which they have been shown to share. Thus the claimed strain would have been obvious to those skilled in the art within the meaning of USC 103.

Accordingly, the claimed invention as a whole was at least <u>prima facie</u> obvious, if not anticipated by the reference, especially in the absence of evidence to the contrary.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irene Marx whose telephone number is (703) 308-2922. The examiner can normally be reached on Monday through Friday from 6:30 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn, can be reached on (703) 308-4743. The appropriate fax phone number for the organization where this application or proceeding is assigned is before final (703) 872-9306 and after final, (703) 872-9307.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Service whose telephone number is (703) 308-0198 or the receptionist whose telephone number is (703) 308-1235.

Irene Marx
Primary Examiner
Art Unit 1651